

IN THE DRAWINGS

The attached sheet of drawings includes changes to Fig. 90. This sheet, which includes Fig. 90, replaces the original sheet including Fig. 90.

Attachment: Replacement Sheet

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claim 10 is pending in the present application. Claims 4-9 are cancelled by the present response.

Support for additions to the claims can be found, at least, in the specification as originally filed, for example, in Figures 87 and 90. Thus, no new matter is added.

In the outstanding Office Action, Claims 7-9 were objected to as being duplicates of Claims 4-6; Claims 5, 6, 8 and 9 are objected to as failing to further limit the claims from which they depend; Claims 4-9 were objected to under 35 U.S.C. §112, first paragraph as failing to comply with the written description requirement; Claims 4-9 were rejected under non-statutory double patenting over Okamoto et al. (U.S. Pat. No. 6,587,417, herein "Okamoto US"); Claims 4-9 were rejected under 35 U.S.C. §102(b) as anticipated by Okamoto et al. (EP 1158497, herein "Okamoto EP"); and Claims 4-9 were rejected under 35 U.S.C. §102(e) as anticipated by Okamoto US.

In the present response Claim 4-9 have been cancelled. Thus, Applicants respectfully submit that the objections and rejections to these claims are moot. Accordingly, Applicants respectfully request that the objections and rejections to Claims 4-9 be withdrawn.

In addition, in the present response Figure 90 has been amended to correct minor informalities. Support for changes to Figure 90 can be found in Figure 86. Specifically, Figure 86 shows that the shortest (minimum) pit length is $0.41\mu\text{m}$ which corresponds to the $0.408\mu\text{m}$ found in Figure 90.

With respect to newly added Claim 10, Applicants respectfully submit that this claim is not described or suggested in the cited Okamoto EP/US reference.

Okamoto EP/US describes a recordable or re-writable information storage medium. Paragraph [0187] of Okamoto EP is cited in the outstanding Action as relating to the present application. However, Okamoto EP/US merely describes that the recording density in the linear direction of information recorded in a header field 3 is lower than the recording density in the linear direction of information recorded in a user data recording field 11. There is no teaching or suggestion in Okamoto EP/US of a connection area positioned between the system lead-in area and the data lead-in area, and a relation of the track pitch and the minimum pit length between the system lead-in area and the data lead-in area/data area.

In addition, the claimed invention provides a significant advantage over previous systems such as Okamoto EP/US. As is described on page 63, line 5 to page 64, line 15 of the present disclosure, it is difficult to reproduce lead-in area information in a stable manner in accordance with DVD-R and DVD-RW specifications (Version 1.0), where the information has been recorded in advance (unreadable emboss). In particular, during reproduction, the reproduction signal amplitude from the portion with high density is reduced. In addressing this problem, if the entire recording density is lowered, a relative signal amplitude from the densest bit position is improved, and the stability and reliability of signal reproduction is improved. However, in this case, the recording density of the lead-in area is lowered and as a result, there occurs a problem that the recording capacity of the entire information recording medium is also lowered.

Taking these issues into consideration, in the claimed invention, for any information recording medium of a read only, write once, or rewritable type, a portion called a lead-in area is divided into a system lead-in area and a data lead-in area. Irrespective of medium type, i.e., a read only, write once, or rewritable type, information required in common is recorded in a system lead-in area having low recording density; and items of information specific to information storage media of a read only type and a rewritable type are recorded in

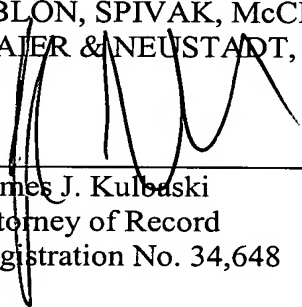
a data lead-in area having high recording density (in this lead-in area, by using a modulation system in which "d = 1" is established, signal detection using the PRML is carried out, thereby making it possible to achieve higher density than conventional systems). In addition, with respect to a write once type information recording medium, a data lead-in area is utilized as a test writing area, thereby making it possible to prevent the lowering of the use efficiency of the entire lead-in area and to achieve a large capacity for the entire information recording medium. Thus, the claimed invention provides a significant advantage over the prior systems, such as Okamoto EP/US, which do not include the claimed features.

Accordingly, Applicants respectfully submit that new added independent Claim 10 patentably distinguishes over Okamoto EP/US.

Consequently, in view of the present amendment and in light of the above comments, no further issues are believed to be outstanding, and the present application is believed to be in condition for allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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